

Montana Laboratory Sentinel



Updates from the MT Laboratory Services Bureau
800-821-7284 <http://healthlab.hhs.mt.gov/>

07/21/20100



Needleless Hemoglobin Spot-check Device

Medscape Medical News: The U.S. Food and Drug Administration has granted 510(k) clearance for a handheld device (Pronto-7; Masimo) for noninvasive hemoglobin spot-check testing, along with saturation of peripheral oxygen, pulse rate, and perfusion index, in virtually any environment. [MORE](#)

New pain-free way to test for bone marrow donors

The Independent: Britain's leading leukemia charity has invented a painless new way to test whether someone is a match for a bone marrow transplant. The Anthony Noland Trust has developed a saliva DNA kit which will allow doctors to match transplant candidates and patients without having to take any blood samples. [MORE](#)

**"I feel that the greatest reward for doing
is the opportunity to do more."
Dr. Jonas Salk**

New IGRA Recommendations

The Centers for Disease Control and Prevention has recently published updated recommendations for the use of Interferon Gamma Release Assays (IGRAs) in the diagnosis of *M. tuberculosis* infection in adults and children. The IGRAs can be used for surveillance purposes and to identify persons likely to benefit from treatment, similar to situations when tuberculin skin tests (TSTs) were used. You can read the entire *MMWR Recommendations and Reports* (June 25, 2010 / Vol. 59 / No. RR-5) at <http://www.cdc.gov/mmwr/pdf/rr/rr5905.pdf>



QuantiFERON Gold In-Tube Testing Change in Reporting at MTPHL

The recent *MMWR Recommendations and Reports* recommends that both the standard qualitative test interpretation and the quantitative assay measurements should be reported together with the criteria used for test interpretation. The MTPHL will be changing their reporting for the QuantiFERON Gold In-Tube test from the current qualitative interpretation only to include the actual quantitative measurements and a revised interpretation.

Contact [Susie Zanto](#) 444-2839 for questions about the reporting structure, and [Debbie Gibson](#) 444-5970 for questions about the actual testing.

Microneedle delivery of H5N1 influenza virus-like particles to the skin induces long-lasting B and T cell responses in mice

A simple method suitable for self-administration of vaccine would improve mass immunization particularly during a pandemic outbreak. Influenza virus-like particles (VLPs) have been suggested as promising vaccine candidates against potentially pandemic influenza viruses as they confer long-lasting immunity but are not infectious. We investigated the immunogenicity and protective efficacy of influenza H5 VLPs containing the hemagglutinin (HA) of A/Vietnam/1203/04 (H5N1) virus delivered into the skin of mice using metal microneedle patches, and also studied the response of Langerhans cells in a human skin model. Microneedle vaccination in the skin with H5 VLPs represents a promising approach for a self-administered vaccine against viruses with pandemic potential. [Clin Vaccine Immunol.](#) 2010 Jul 14. (PMID: 20631330 [PubMed - supplied by publisher] Emory University, Georgia Institute of Technology, Centers for Disease Control and Prevention, and Welsh School of Pharmacy, UK.)

MT Communicable Disease Update Week 27 Ending 07/10/10

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.

Questions regarding its content should be directed to 406.444.0273 (24/7/365).

<http://cdepi.hhs.mt.gov>

DISEASE INFORMATION

Summary – MMWR Week 27 - Ending 7/10/10 – Disease reports received at DPHHS during the reporting period June 27th through July 3rd, 2010 included the following:

- Vaccine Preventable Diseases: Varicella (3)
- Invasive Disease: *Streptococcus* group A (1)
- Enteric Diseases: Campylobacteriosis (5), Cryptosporidiosis (1), *E. coli* non – 0157 (1)
- Other Conditions: None
- Travel Related Conditions: None

NOTE: The report has multiple pages reflecting the following information: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases YTD; (3) cases just this past reporting week; (4) clusters and outbreaks; and (5) an STD summary.

THE "BUZZ"

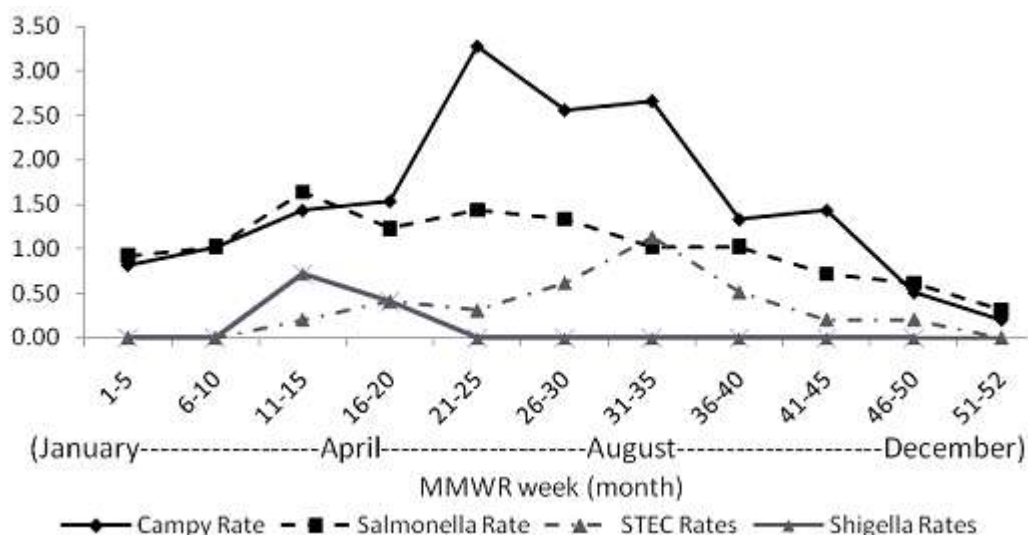
Enteric Illness Investigation – Summer time brings outdoor fun complete with water sports, BBQs, potluck events, increased human – animal contact, and typically higher rates of enteric illness in MT (Figure). Collecting timely information is of upmost importance during an enteric illness investigation. Identifying possible sources of illness can provide information useful for public health messaging and education that may be important and unique to our state. Most cases of enteric illness in Montana and the United States appear sporadically, however, cases are sometimes linked to local and national outbreaks. The earlier information is gathered from an ill person, the better the patient's recall will be, and the better the chance becomes of identifying a source. Checklist questionnaires combined with an open ended 3 -5 day food history provide the most thorough types of exposure histories. The MT Communicable Disease Epidemiology program is working to provide tools for local health departments to use during enteric illness investigations. To download exposure questionnaires and protocols for Shiga toxin-producing *Escherichia coli* (STEC) and *Salmonella*, or a form for collecting general complaint information when a pathogen has not been identified, log on to the TCC at

https://www.montanapublichealthtcc.org/kc/login/login.asp?kc_ident=kc0001&strUrl=http://www.montanapublichealthtcc.org/Default.asp enter your user name and password, and enter the FCS Team Room, or visit:

http://www.dphhs.mt.gov/PHSD/epidemiology/documents/E_coliMT.pdf or

http://www.dphhs.mt.gov/PHSD/epidemiology/documents/Salm_MT.pdf

Check back for new protocols and additional pathogen specific questionnaires coming soon!



West Nile Virus – The mosquitoes are biting and it's time to think about WNV in MT. To date, MT has had no reports of human WNV illness, however, now is the time to start reminding people about the importance of mosquito control measures and WNV prevention. The best protection against WNV is to avoid being bitten by mosquitoes. This can be accomplished by following a few simple guidelines:

- Mosquitoes bite most often at dawn and dusk, wear long pants and long sleeved shirts if you are out during these hours.
- Use a mosquito repellent, DEET is most effective at repelling mosquitoes
- Empty uncovered containers of standing water that may be near or around the home
- Change outdoor pet water frequently

If you'd like "Fight the Bite" posters or brochures contact us at (406) 444-0273. CDC WNV educational materials are available at http://www.cdc.gov/ncidod/dvbid/westnile/prevention_info.htm.

INFORMATION / ANNOUNCEMENTS

NEW! Bed Bugs – Bed bugs are often thought to be ancient history and have been mired in song and story. However, in recent years, bed bugs have made a striking comeback in the United States, and have been reported in Montana. Although they are not known to transmit disease, bed bug infestations may result in irritating, itchy bites and anxiety. If a bed bug infestation is suspected, certain steps must be taken to eliminate the bugs, including consultation with a pest management professional. The Michigan Department of Community Health has gathered experts from across the state government, local municipalities and industry groups to develop resources useful for combating bed bug infestations and for preventing the spread of bed bugs. To view these resources and learn more about bed bugs: visit: http://www.michigan.gov/emergingdiseases/0,1607,7-186-26346_25949_55522---,00.html

Lyme Disease Testing – Although *Ixodes scapularis*, the tick vector for Lyme disease has not yet been found in MT, Lyme disease is sometimes diagnosed in MT residents that have traveled to Lyme disease endemic areas. Lyme disease can be difficult to diagnose and **clinical presentation coupled with specific laboratory testing is necessary to confirm a case of Lyme disease**. The current CDC recommendations for laboratory confirmation of Lyme disease include:

- 1) a positive culture for *Borrelia burgdorferi* **OR**
- 2) a two-step process for testing blood –
 - The first step uses an ELISA or IFA test. If this test is positive:
 - A second test using a Western blot should be run to confirm the initial ELISA or IFA test

Serology is the most common test used to test for Lyme disease. A positive ELISA or IFA followed by a positive Western blot coupled with a clinical marker for the disease (erythema migrans (EM), the initial skin lesion that occurs in 60%-80% of patients, with a known exposure, or a late clinical manifestation including rheumatologic, neurologic, and cardiac abnormalities), and illness onset date are necessary to confirm a case of Lyme disease. For more information visit http://www.cdc.gov/ncidod/dvbid/lyme/ld_humandisease_diagnosis.htm

Traveler's Health – Summer time brings the opportunity for many Montanans to travel abroad. When it comes to staying healthy while traveling, it is important to be prepared and protected. Some proactive steps can be taken to anticipate issues that could arise while traveling internationally:

- Learn about your destination – awareness of risks can go a long way
- See a doctor prior to travel – routine vaccinations or medications may provide extra protection in some areas
- Consider your health status before travel – special needs and current illness or injury may influence choice of travel destination
- If you become ill shortly after travel, or return ill from a trip, be sure to tell your physician where you were travelling

More information about healthy traveling can be found at <http://wwwnc.cdc.gov/travel/content/survival-guide.aspx>